

TRENCHCOAT™ Protective Film

Overview

TRENCHCOAT™ Protective Film is a two-layer adhesive film designed for lamination to galvanized steel for conversion to corrugated steel pipe. TRENCHCOAT film is laminated to coil, flat, or strip galvanized steel and subsequently formed into corrugated pipe or other similar structures. The film provides corrosion and abrasion protection to the steel. TRENCHCOAT products should only be laminated by Dow approved laminators. When converting steel coated with TRENCHCOAT into corrugated or spiral ribbed pipe, care should be taken to minimize film damage. Repair of damaged coating should be done in accordance with ASTM A 762/762M Note II and AASHTO M245 Note II.

New experimental films are continually being developed. Please discuss your particular application needs with your Dow representative.

General Characteristics:

- Lamination Peak Metal Temperature: 350-450°F (176-232°C)
- · Yield: 202 sq ft/lb/mil
- · Colors: Black
- Gauge Range: 12.0 mil (.30 mm)Width Range: 10-60 in (254-1524 mm)
- · FDA Compliance: No

Mechanical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Coefficient of Friction	0.55		0.55		ASTM D1894
Films	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Secant Modulus					ASTM D882
MD	23300	psi	161	MPa	
TD	23700	psi	163	MPa	
Tensile Strength					ASTM D882
MD: Break	3000	psi	20.7	MPa	
TD: Break	2800	psi	19.3	MPa	
Tensile Elongation					ASTM D882
MD: Break	470	%	470	%	
TD: Break	490	%	490	%	
Elmendorf Tear Strength - MD	2800 to 3200	g	2800 to 3200	g	ASTM D1922
Film Width	10 to 60	in	254 to 1520	mm	Dow Method
Yield	29100	in²/lb	41.4	m²/kg	Dow Method
Hardness	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Durometer Hardness (Shore D, 10 sec)	46		46		ASTM D2240
Thermal	Nominal Value	(English)	Nominal Value	(SI)	
Lamination Peak Metal Temperature	350 to 450	°F	177 to 232	°C	
Electrical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Dielectric Strength	2200	V/mil	87	kV/mm	ASTM D149
Additional Information					

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Resistance to most acids & bases, ASTM D1308, 1400 hr, 73°F: No change

Adhesion, ASTM D903, 73°F: 110 lb/in

Imperviousness, ASTM A742, 48 hr, reagent exposure: No change

Resistance to moist SO2 attack, Kesternich DIN 50018.2.OL, 40 cycles: No attack or loss of adhesion

Salt Fog Rating, ASTM B117, 1000 hours: 8 minimum

Cleveland Condensing humidity cabinet, ASTM D2247, 6 months exposure, 130°F: No attack or loss of adhesion

Weatherability, ASTM D3361, 3000 hours: No cracking or delamination

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

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North America		Europe/Middle East	+800-3694-6367
U.S. & Canada:	1-800-441-4369		+32-3-450-2240
	1-989-832-1426	Italy:	+800-783-825
Mexico:	+1-800-441-4369		
Latin America		South Africa	+800-99-5078
Argentina:	+54-11-4319-0100		
Brazil:	+55-11-5188-9000		
Colombia:	+57-1-219-6000	Asia Pacific	+800-7776-7776
Mexico:	+52-55-5201-4700		+603-7965-5392

www.dowplastics.com

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